

REMARKS

At present, applicants' claims 1-2 stand rejected under 35 U.S.C. § 102 based upon the patent to Pong et al. (U.S. Patent No. 6,516,343 issued February 4, 2003, based upon an application originally filed on April 24, 2000). In light of the comments presented below, this rejection is respectfully traversed.

It is first noted that a rejection under 35 U.S.C. § 102 requires an exact matching of every element in an applicant's claimed method with a correspondingly described element in the cited patent. Furthermore, these elements must be connected in the same way to perform the same function. All of the cited elements must be found within the four corners of a single cited document. Accordingly, it is generally agreed that a rejection under 35 U.S.C. § 102 is indeed a narrow ground of rejection.

While there appear to be certain superficial similarities between applicants' claimed invention and the method described in the patent to Pong et al., these similarities are, upon closer reading, quite evanescent. In particular, it is noted, as a first major distinction, that the process described by Pong et al. is initiated by a request for a memory-to-memory transfer. This request necessarily includes a source address and a destination address (column 1, lines 57-58). A lookup operation is then performed based upon the destination address to determine a destination system control unit that controls access to the destination memory which contains the destination address. In this regard, it is noted that the Examiner has asserted an equivalence between a control unit and a communications adapter. However, applicants first of all strenuously traverse this assertion of equivalence. Nonetheless, solely for the purposes of argument, it is assumed that, for the present discussion, these two entities can be made equivalent.

Even if the asserted equivalence holds, it is nonetheless seen that the very essence and first initial step of the process recited in the patent to Pong et al. begins with the transmission of a request which includes two addresses. As a first major difference, it is noted that applicants' claimed process begins not with the transmission of a request, but rather, with the transmission of a message. Furthermore, as a second and even more significant item of differentiation, it is noted that in the patent to Pong et al., the destination for the data which is moved is provided by the requester of the move. In short, the address to which the data is directed (the destination address) is determined at the very outset of the process.

In contrast, it is noted that applicants' claimed process includes a step in which, once a message has been transmitted, then and only then is a destination address determined. To put it another way, in the process recited in the patent to Pong et al., the destination address is determined at the transmission end of the request. In contrast, in applicants' claimed process the destination address is determined at the destination end of the process. Furthermore, the destination address is determined at the second data processing system and by the second data processing system. Accordingly, it is seen that the claimed process is in fact significantly different from that which is recited in the patent to Pong et al. For these reasons and other reasons indicated below, it is therefore respectfully requested that the rejection of applicants' claims 1-2 under 35 U.S.C. § 102 be withdrawn.

Attention is next directed to the consideration alluded to above concerning the Examiner's assertion that a control unit is the same thing as a communications adapter. As described in the patent to Pong et al., a control unit is a device that controls access to the destination memory. It is an access control device; it is not a communications adapter. As a control device, there is no need for it to include a temporary memory. However, in applicants' claimed process, it is seen that the communications adapter does indeed include a temporary memory. Accordingly, it is seen that the equivalence

that the Examiner asserts between a source or destination control unit and a communications adapter is ill founded and inaccurate. Accordingly, since the patent to Pong et al. does not teach, disclose, or suggest the utilization of communication adapters, the process described in the patent to Pong et al. is necessarily devoid of any teachings with respect to such devices.

As yet another point of difference, it is pointed out that the patent to Pong et al. is directed to the transmission of blocks of data. A data block, as that term is used by Pong et al., is data only with no header information. In contrast, it is seen that applicants' claimed process is directed to the transmission of messages. Message passing inherently includes header information transfer along with the data. Furthermore, applicants' claimed process, as indicated above, begins with the transmission of a message. This message is transmitted to a communications adapter connected to a second data processing system. This message does not contain the actual memory locations in which this message ultimately resides in the second system. This is determined at the destination.

Furthermore, it is seen that in applicants' claimed process, there is an exchange of information that occurs between the communications adapter and the second data processing system. This interchange begins with providing an indication from the adapter to the second data processing system that a message has been received and is in the temporary adapter memory. At this point, the second data processing system transfers to the adapter real address information which indicates the desired target memory location in the second data processing system for this message. At this point, the message is transferred into the specified memory location. With respect to this part of applicants' process, it is particularly seen that the patent to Pong et al. is completely devoid of any teachings, suggestions, or disclosures concerning interchange of such information between a communications unit and a processor or processing element.

For this reason also, it is seen that there are in fact significant differences between the patent to Pong et al. and that which is recited in applicants' claims.

In addition to all of the differences set out above, there is yet at least one other difference of significant note between applicants' claimed method and that which is described in the patent to Pong et al. In particular, it is noted that, not only does the process in Pong et al. begin with a transmission of a request coupled with both a source and destination address, but it also further appears from the patent to Pong et al. that the destination address is employed through the mediation of a lookup table to determine the specific destination system control unit that must be employed. Assuming that the Examiner's assertion of equivalence between control units and communication adapters were to be accepted (and it isn't), this would mean that a significant part of the process in Pong et al. is the determination of which communications adapter to use. In stark contrast, no such process step is taught, disclosed, suggested, or even required by the process set forth in applicants' claimed invention. In applicants' claimed invention, the relevant communications adapter is already known. It does not have to be determined nor do different things occur as a result of it being determined that different destination system control units are targeted. For this reason also, it is seen that applicants' claimed process is in fact significantly different than that taught by the patent to Pong et al.

The invention described in the patent to Pong et al. is significantly different than that which is claimed by the present applicants for even more reasons than are set out above. Pong et al. are solely concerned with the transfer of data from one portion of memory to another portion of the same memory. In short, Pong et al. operate in a single address space where the determination of real address locations is very easily accomplished. Pong et al. have to deal with only a single operating system. In stark contrast, applicants' claimed invention involves the transfer of messages (which are not the same as data blocks, as pointed out above) between disparate data processing

systems which do not even have to be located on the same continent! The destination data processing system does not even have to be running the same operating system. And clearly, the address space for the destination system is totally unrelated to the address space of the system from which the message originates. To put it one way, the patent to Pong et al. is like two people talking in the same room; in contrast, applicants' invention is like two people communicating across a continent by mail. This distinction takes on even further importance when it becomes necessary to determine that the mail has reached the correct addressee.

For all of the reasons indicated above, it is seen that there are in fact significant differences between applicants' claimed process and the teachings found in the patent to Pong et al. Furthermore, these differences are significant and would not be obvious to those of ordinary skill in the art. Accordingly, it is respectfully requested that the rejection of applicants' claims 1-2 under 35 U.S.C. § 102 based upon the patent to Pong et al. is not well founded. It is therefore requested that this rejection be withdrawn. It is furthermore asserted that the teachings found in the patent to Pong et al. are so far afield from those found in the applicants' claims as to not in any way be useful as a basis to render applicants' claims obvious under 35 U.S.C. § 103.

It is noted that the present response does not require the payment of any additional fees. Please note that formal drawings are being submitted with this amendment response along with the appropriate transmittal sheet.

Accordingly, it is now seen that all of the applicants' claims are in condition for allowance. Therefore, early notification of the allowability of applicants' claims is earnestly solicited. Furthermore, if there are any matters which the Examiner feels could be expeditiously considered and which would forward the prosecution of the instant application, applicants' attorney wishes to indicate his willingness to engage in

any telephonic communication in furtherance of this objective. Accordingly, applicants' attorney may be reached for this purpose at the numbers provided below.

Respectfully Submitted,

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Date

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